

aforementioned region and the uniformity of the thickness of the magnetic recording layer are required.

The present invention provides a method for imparting design to the aforementioned region by forming characters, patterns, and the like, while occurrences of variations in output are controlled.

On the other hand, Kubota et al. describes magnetic cards having various structures, a transferable magnetic recording medium for producing the magnetic card, and a method for producing the same. However, Kubota et al. fails to consider output variations in reproduced output. Therefore, it should be emphasized that occurrences of output variations in reproduced output are not considered in Kubota et al. as a problem to be solved by the invention.

The Examiner has asserted that the present invention is disclosed in Kubota et al. with reference to FIG. 5 of Kubota et al., since uniformity of thickness of the "pattern region (pattern portion)" and thickness of the "non-pattern region (non-pattern portion)" is described. However, FIG. 5 of Kubota et al., on which the reason for rejection is based, does not correspond either to the transferable magnetic tape of the present invention as described above, or to the magnetic card in which the region in the form of a tape is formed on the card base material.

FIG. 5 of Kubota et al. indicated by the Examiner is a cross-sectional view of magnetic card shown in FIG. 3. Patterns and the like are imparted on the entire surface of the color layer covering the entire surface of the over sheet (card substrate) including the magnetic recording layer embedded in at least one part thereof. There is no correspondence relationship between the region at which the patterns are formed and the region at which the magnetic recording layer is embedded. In addition, the magnetic recording layer is previously embedded in the covering layer in another step. For this reason, the formation of the color layer, printed layer, and protective layer does not basically affect the shape of the magnetic recording layer. The patterns are formed on the color layer in an independent manner with respect to the magnetic recording layer, after the over sheet in which the magnetic recording layer is embedded is

covered by the color layer. The formation of the pattern region 5a and the non-pattern region 5b in the printed layer in Kubota et al. merely corresponds to a general process of forming the patterns and the background thereof.

In contrast, when a magnetic card is produced using the transferable-magnetic tape of the present invention, patterns are formed only on the magnetic recording layer in the form of a tape which is a region of record reproduction. Kubota et al. fails to disclose the aforementioned types of transferable magnetic tapes and magnetic cards produced from the aforementioned transferable magnetic tapes. If the closest example among those of Kubota et al. is cited by constraint, one shown in FIG. 13 can be mentioned as a transferable magnetic recording medium while the medium is not in the form of a tape. In addition, as examples of the magnetic cards formed therefrom, mention may be made of FIG. 4 (conceptual view) and FIG. 6 (cross-sectional view).

In FIG. 13 of Kubota et al., after the protective layer 6, printed layer 5 and color layer 4 are formed, the magnetic recording layer 3 is formed. It is clear that the irregularity on the surface of the color layer before the magnetic recording layer is formed largely affects the shape of the magnetic recording layer formed thereon, and it is also clear that the irregularity gets involved in the formation of the printed layer 5 below the color layer. As described above, the transferable magnetic tape and magnetic card formed therefrom in accordance with the present invention have characteristics greatly different from the magnetic card shown in FIG. 5 of Kubota et al. not only in view of design properties, but also in view of reduction in occurrences of variations in output, since the shape of the magnetic recording layer of the present invention is extremely affected by the formation of other layers, and variations in output easily occur.

Applicants respectfully submit that the cross-sectional view of FIG. 5 described in Kubota et al. merely shows the schematic cross-section of the magnetic card on the basis of the following reasons. Kubota et al. describes that the thickness of the magnetic recording layer ranges from 5 to 20 μm , and the thickness of the protective

layer ranges from 0.5 to 3 μm . Therefore, the thickness of the magnetic recording layer is, in general, larger than that of the protective layer. However, it can be seen from FIG. 5 that the thickness of the magnetic recording layer is approximately the same as or is smaller than that of the protective layer.

Kubota et al. discloses that there may be either a case wherein a pattern portion 5a is provided on the color layer 4, and a non-pattern portion 5b is provided in the remaining area to form a single pattern layer as shown in Fig. 5, or a case wherein no non-pattern portion 5b is provided and, instead, the color layer 4 remains exposed, on column 4, lines 2 to 7. In other words, Kubota et al. discloses that non-pattern portion may be formed or may not be formed in the area other than the pattern portion on the color layer. This description is the evidence denying the necessity for forming the printed layer having a uniform thickness as described in the present invention.

As described above, in the cross-sectional view of FIG. 5 of Kubota et al., the information of the thickness is not accurately reflected. The structure having 5a and 5b shown in the printed layer in Fig. 5 merely indicates the formation of patterns with the background by using a typical cross section, and never indicates that the thickness of the pattern region and the thickness of the non-pattern region in the printed layer are the same.

In contrast, in the transferable magnetic tape or the magnetic card shown in FIG. 13 and FIG. 6 which have a structure close to that of the present invention, the particular structure of the printed layer thereof is not shown. In addition, the structure of the printed layer disclosed in the present invention is not disclosed in Kubota et al..

The Examiner may assert that FIG. 5 of Kubota et al. shows that the thickness of the pattern region is the same as the thickness of the non-pattern region in the printed layer, and the information obtained from FIG. 5 can be directly applied to the printed layer shown in FIG. 6 and FIG. 13.

The Examiner has urged that the cross-sectional view of FIG. 5 exceeds a simple schematic view. This is different from the consideration of the Applicants. In addition, the Examiner has asserted that the thickness of the pattern region 5a in the printed layer and the thickness of the non-pattern region 5b other than the pattern region 5a are uniform, by considering that the indication in the drawings is the same as the actual shape. However, if the indication in the drawings is emphasized for showing the actual shape, it should be concluded that since there is no indication at the outside of the pattern region shown in the printed layer of FIG. 6 and FIG. 13, no corresponding layer is formed on the pattern region. Otherwise, the treatments of the drawings in Kubota et al. are not coherent. Kubota et al. fails to describe the formation of the printed layer 5 in FIG. 13 and FIG. 6 in detail. In addition, Kubota et al. fails to describe or teach that the pattern printed region and the filling layer region are formed and adjusted so that the thickness of the pattern printed region and the thickness of the filling layer region are the same.

As described above, even if it can be said that the thickness of the pattern region and the thickness of the non-pattern region are uniform in FIG. 5 of Kubota et al., the information cannot be directly applied to the printed layer of FIG. 6 and FIG. 13.

In addition, the magnetic card shown in FIG. 5 of Kubota et al. has a different structure from that of the corresponding magnetic card or the transferable magnetic tape shown in FIG. 6 and FIG. 13, and the method for producing the same and the production steps are different from each other. The color layer in FIG. 6 and FIG. 13 does not cover the entire surface of the magnetic card as shown in the case of the color layer in FIG. 5. The magnetic recording layer, the color layer, and the printed layer in FIG. 6 are embedded in the cover sheet via the transferring step. In this point, those of FIG. 5 are greatly different therefrom. Therefore, even if information that the thickness of the pattern region and the thickness of the non-pattern region of the printed layer are uniform can be obtained from FIG. 5, this information cannot be directly applied to the printed layer of the transferable magnetic tape or the magnetic card shown in FIG. 6 and FIG. 13.

As described above, the cross-sectional view of the magnetic card shown in FIG. 5 of Kubota et al. is simply a schematic view, and it cannot be concluded from FIG. 5 that the thickness of the pattern region and the thickness of the non-pattern region in the printed layer are uniform. Even if the aforementioned conclusion could be made, the magnetic card shown in FIG. 5 is different from the transferable magnetic tape of the present invention or the magnetic card produced from the aforementioned magnetic tape in view of structures and production methods. In addition, Kubota et al. completely fails to recognize the extremely important objective of the present invention in which variations in output are controlled. Therefore, the transferable magnetic recording tape and the magnetic card according to the present invention could not have been easily conceived of by a person skilled in the art based on the information obtained from FIG. 5 of Kubota et al.

Thus, the 35 U.S.C. §103(a) rejection should be withdrawn.

In view of the remarks above, claims 1-5 and 12-16 are in condition for reexamination.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1105.

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Respectfully submitted,

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